Serial Number: __10|005, 21|__

CRF Processing Date: __12|12|01__ #3
Edited by: ___
Verified by: ___DC___ (STIC sta

ENTERED

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line

☐ Edited a formal error in the Current Application Data section, specifically:
_____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:
_____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
_____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
_____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included:
_____

☐ Deleted extra, invalid, headings used by an applicant, specifically:
_____

☑ Deleted: ☑ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as_____.

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically:
_____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically:
_____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☐ Other:
_____
_____
_____
_____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.   3/1/95

```
                RAW SEQUENCE LISTING              DATE: 12/17/2001
                PATENT APPLICATION:  US/10/005,211    TIME: 12:05:31

                Input Set : A:\PTO.DC.txt
                Output Set: N:\CRF3\12172001\J005211.raw

        4 <110> APPLICANT: Allen, Keith D.
        6 <120> TITLE OF INVENTION: TRANSGENIC MICE CONTAINING
        7        POLYCYSTIN-RELATED GENE DISRUPTIONS
       10 <130> FILE REFERENCE: R-325
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/005,211
C--> 12 <141> CURRENT FILING DATE: 2001-12-04
       12 <150> PRIOR APPLICATION NUMBER: US 60/256,201
       13 <151> PRIOR FILING DATE: 2000-12-13
       15 <150> PRIOR APPLICATION NUMBER: US 60/250,999
       16 <151> PRIOR FILING DATE: 2000-12-04
       18 <160> NUMBER OF SEQ ID NOS: 4
       20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
       22 <210> SEQ ID NO: 1
       23 <211> LENGTH: 2486
       24 <212> TYPE: DNA
       25 <213> ORGANISM: Mus musculus
       27 <400> SEQUENCE: 1
       28 ggcagaacgg gcatagtgga acggaccgtg tggtatgctc cgcgatgtct gaggcgactt 60
       29 ggtggtaccg aggagggact tcaaaacatg acctgcatta cagaagggaa gcggaggtta 120
       30 acaccacact cgaggagttg ttactctatt ttattttctt aataaatcta tgcatattga 180
       31 cttttgggat ggtcaatcca catatgtact atttaaacaa agttatgtcg tctctgtttg 240
       32 tggacacttc tctacctgat gatgaaagaa gcagctttag gtccattcgg agcataactg 300
       33 agttttggaa gttcatggaa ggacccctca tcgacggctt gtactgggac tcgtggtatg 360
       34 gcaccaaaca gctgtacagt gtgaagaaca gcagccgcat ctactacgag aacgttcttc 420
       35 tcggcatccc cagagtgcgg caactgcgag tccgaaacaa cacttgcaag gtctacccag 480
       36 ctttccagtc cctggtcagc gactgctaca gcaagtacac agtggaaaac gaagacttct 540
       37 ctgattttgg cctcaaacgc aatccagaat ggacgcacac gccttcttcc cgcactgccc 600
       38 catggcactg ggggtttgtt ggcgtatacc gagatggagg atatatagtc acgttatcaa 660
       39 aatcaaaatc tgaaaccaaa gccaaatttg ttgaccttcg actgaacaac tggattagca 720
       40 gaggcaccag ggctgttttt attgatttct ccctgtacaa tgctaatgtc aacctgtttt 780
       41 gcatcatcag gctgctggca gagttccctg cgacgggtgg gctcctcacc tcctggcagt 840
       42 tctactctgt gaagctcctc agatacgtct cctactacga ctacttcatt gcctcctgtg 900
       43 aagtcatatt ttgtattttt ctctttgtct tcataataca agaactgagg aaagtgaacg 960
       44 agtttaagtc tgcctatttc agaagtgtct ggaactggct ggagatgctg ctcctgctgc 1020
       45 tctgtttttct cgccgtgtct ttctatgcat actgtaacat gcagagcttt ctcttgcttg 1080
       46 gacagctgct gaaaaacact gacagctatc ccgacttta cttccttgca tactggcaca 1140
       47 tttactataa caacgtaatt gctatcacta tcttctttgc atggataaag atattcaagt 1200
       48 tcataagctt caatgagaca atgtcgcagc tgtcatcaac actctcccgc tgcatgaagg 1260
       49 acatcgtggg gttcgccatc atgttcttca tcatcttctc tgcttatgcc cagttgggat 1320
       50 ttctggtttt tgggtcacag gttgatgatt tttcaacttt tcaaaattcc atatttgcac 1380
       51 aatttcgaat tgtcctcggg gactttaact ttgctggcat ccagcaggcc aactggatct 1440
       52 tggggcccat ctacttcatc acgttcatct tctttgtgtt ctttgtgctc ctgaacatgt 1500
       53 tcttggcaat aattaatgac acctattctg aagttaaggc tgattattca ataggcagaa 1560
       54 gaccagattt tgaacttggt aaaataattc aaaagagttg ctttaatgtt ctcgagaaac 1620
       55 tcagactcaa gaaagctcaa gctaaagaag aaaagaaaat gcaaaccact gacttggccc 1680
       56 agagagccag aagagaaggc tttgatgaaa gtgagatcca agaggcagag cagatgaaaa 1740
       57 gatggaagga aaggcttgaa aaaaagtatt attctacaga aattcaagac gattatcagc 1800
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RAW SEQUENCE LISTING   DATE: 12/17/2001
PATENT APPLICATION: US/10/005,211   TIME: 12:05:31

Input Set : A:\PTO.DC.txt
Output Set: N:\CRF3\12172001\J005211.raw

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58 ctgtcactca gcaagaattc cgagagctct ttttatacgc ggtggagctt gagaaggaat 1860
59 tacactatgt cagtttaaaa ctgaaccaac tgatgagaaa gctgcactag caggctgaca 1920
60 agtggagtca ttttataaga aaaggcaacc gaagaatttc attcagtatg aagatttttt 1980
61 cctctcaatt ttcttcagta atgcaaaaga aaaaccaaaa agtaaccaga agtgcttttt 2040
62 atttcaaagt tcttgaagta aaagagtaaa actcttgtcc tttgctaaca gccgtgtctg 2100
63 cagtaaaaca atgaaggagc ctgcgtgttt cctaagtgtg gagaggatct gcgggaatgt 2160
64 ggaacagctt tccttgccta ctggaaccac aaacaagcac acaatgggac tctctgagtg 2220
65 cctgacaaag tgaacgcaag tacagccaag cacacatggt gaactgtcag ggaacacaag 2280
66 cactttatgg cgtcaacttt caaggaacat attttatatg gattttgaag agtcttgttt 2340
67 gctgataaga acttcaagaa gtctaagctt ggctttgatt ctcttgtatt ccttatattc 2400
68 ctcaagcacc ggaacacgat cctccttctg ggcattccta gggaagataa aactctgtaa 2460
69 agcaaaaaaa agaaaaaaaa aaaaaa                                      2486
71 <210> SEQ ID NO: 2
72 <211> LENGTH: 621
73 <212> TYPE: PRT
74 <213> ORGANISM: Mus musculus
76 <400> SEQUENCE: 2
77 Met Ser Glu Ala Thr Trp Trp Tyr Arg Gly Gly Thr Ser Lys His Asp
78 1               5                   10                  15
79 Leu His Tyr Arg Arg Glu Ala Glu Val Asn Thr Thr Leu Glu Glu Leu
80              20                  25                  30
81 Leu Leu Tyr Phe Ile Phe Leu Ile Asn Leu Cys Ile Leu Thr Phe Gly
82          35                  40                  45
83 Met Val Asn Pro His Met Tyr Tyr Leu Asn Lys Val Met Ser Ser Leu
84      50                  55                  60
85 Phe Val Asp Thr Ser Leu Pro Asp Asp Glu Arg Ser Ser Phe Arg Ser
86 65                  70                  75                  80
87 Ile Arg Ser Ile Thr Glu Phe Trp Lys Phe Met Glu Gly Pro Leu Ile
88              85                  90                  95
89 Asp Gly Leu Tyr Trp Asp Ser Trp Tyr Gly Thr Lys Gln Leu Tyr Ser
90              100                 105                 110
91 Val Lys Asn Ser Ser Arg Ile Tyr Tyr Glu Asn Val Leu Leu Gly Ile
92          115                 120                 125
93 Pro Arg Val Arg Gln Leu Arg Val Arg Asn Asn Thr Cys Lys Val Tyr
94      130                 135                 140
95 Pro Ala Phe Gln Ser Leu Val Ser Asp Cys Tyr Ser Lys Tyr Thr Val
96 145                 150                 155                 160
97 Glu Asn Glu Asp Phe Ser Asp Phe Gly Leu Lys Arg Asn Pro Glu Trp
98              165                 170                 .175
99 Thr His Thr Pro Ser Ser Arg Thr Ala Pro Trp His Trp Gly Phe Val
100             180                 185                 190
101 Gly Val Tyr Arg Asp Gly Gly Tyr Ile Val Thr Leu Ser Lys Ser Lys
102          195                 200                 205
103 Ser Glu Thr Lys Ala Lys Phe Val Asp Leu Arg Leu Asn Asn Trp Ile
104      210                 215                 220
105 Ser Arg Gly Thr Arg Ala Val Phe Ile Asp Phe Ser Leu Tyr Asn Ala
106 225                 230                 235                 240
107 Asn Val Asn Leu Phe Cys Ile Ile Arg Leu Leu Ala Glu Phe Pro Ala
108             245                 250                 255
```

```
109 Thr Gly Gly Leu Leu Thr Ser Trp Gln Phe Tyr Ser Val Lys Leu Leu
110             260             265             270
111 Arg Tyr Val Ser Tyr Tyr Asp Tyr Phe Ile Ala Ser Cys Glu Val Ile
112         275             280             285
113 Phe Cys Ile Phe Leu Phe Val Phe Ile Ile Gln Glu Leu Arg Lys Val
114     290             295             300
115 Asn Glu Phe Lys Ser Ala Tyr Phe Arg Ser Val Trp Asn Trp Leu Glu
116 305             310             315             320
117 Met Leu Leu Leu Leu Leu Cys Phe Leu Ala Val Ser Phe Tyr Ala Tyr
118             325             330             335
119 Cys Asn Met Gln Ser Phe Leu Leu Leu Gly Gln Leu Leu Lys Asn Thr
120         340             345             350
121 Asp Ser Tyr Pro Asp Phe Tyr Phe Leu Ala Tyr Trp His Ile Tyr Tyr
122         355             360             365
123 Asn Asn Val Ile Ala Ile Thr Ile Phe Phe Ala Trp Ile Lys Ile Phe
124     370             375             380
125 Lys Phe Ile Ser Phe Asn Glu Thr Met Ser Gln Leu Ser Ser Thr Leu
126 385             390             395             400
127 Ser Arg Cys Met Lys Asp Ile Val Gly Phe Ala Ile Met Phe Phe Ile
128         405             410             415
129 Ile Phe Ser Ala Tyr Ala Gln Leu Gly Phe Leu Val Phe Gly Ser Gln
130         420             425             430
131 Val Asp Asp Phe Ser Thr Phe Gln Asn Ser Ile Phe Ala Gln Phe Arg
132         435             440             445
133 Ile Val Leu Gly Asp Phe Asn Phe Ala Gly Ile Gln Gln Ala Asn Trp
134     450             455             460
135 Ile Leu Gly Pro Ile Tyr Phe Ile Thr Phe Ile Phe Phe Val Phe Phe
136 465             470             475             480
137 Val Leu Leu Asn Met Phe Leu Ala Ile Ile Asn Asp Thr Tyr Ser Glu
138             485             490             495
139 Val Lys Ala Asp Tyr Ser Ile Gly Arg Arg Pro Asp Phe Glu Leu Gly
140         500             505             510
141 Lys Ile Ile Gln Lys Ser Cys Phe Asn Val Leu Glu Lys Leu Arg Leu
142         515             520             525
143 Lys Lys Ala Gln Ala Lys Glu Glu Lys Lys Met Gln Thr Thr Asp Leu
144     530             535             540
145 Ala Gln Arg Ala Arg Arg Glu Gly Phe Asp Glu Ser Glu Ile Gln Glu
146 545             550             555             560
147 Ala Glu Gln Met Lys Arg Trp Lys Glu Arg Leu Glu Lys Lys Tyr Tyr
148             565             570             575
149 Ser Thr Glu Ile Gln Asp Asp Tyr Gln Pro Val Thr Gln Gln Glu Phe
150         580             585             590
151 Arg Glu Leu Phe Leu Tyr Ala Val Glu Leu Glu Lys Glu Leu His Tyr
152         595             600             605
153 Val Ser Leu Lys Leu Asn Gln Leu Met Arg Lys Leu His
154     610             615             620
157 <210> SEQ ID NO: 3
158 <211> LENGTH: 200
159 <212> TYPE: DNA
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RAW SEQUENCE LISTING   DATE: 12/17/2001
PATENT APPLICATION: US/10/005,211   TIME: 12:05:31

Input Set : A:\PTO.DC.txt
Output Set: N:\CRF3\12172001\J005211.raw

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160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: Targeting vector
165 <400> SEQUENCE: 3
166 catgcataca tgggtgcacg tgcgtgcgtg caaacaccca cacacagata gataaatgta 60
167 aaaaaatact taggcaatgc tgtttttttt aagcttggga aattaatatt tttgaacact 120
168 gctgatgtgg gattttaagt tacaaatgtt aaacttgttc tccttagtga cttttgggat 180
169 ggtcaatcca catatgtact                                             200
171 <210> SEQ ID NO: 4
172 <211> LENGTH: 200
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: Targeting vector
179 <400> SEQUENCE: 4
180 gtatggcaac aaacagctgt acagtgtgaa gaacagcagc cgcatctact acgagaacgt 60
181 tcttctcggc atccccagag tgcggcaact gcgagtccga aacaacactt gcaaggtcta 120
182 cccagctttc cagtccctgg tcagcgactg ctacagcaag tacacagtgg aaaacgaaga 180
183 cttctctgat tttggcctca                                             200
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/005,211

DATE: 12/17/2001
TIME: 12:05:32

Input Set : A:\PTO.DC.txt
Output Set: N:\CRF3\12172001\J005211.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date